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(71) Applicant (for all designated States except US): THE
REGENTS OF THE UNIVERSITY OF CALIFORNIA
[US/US]; 1111 Franklin Street, 12 th Floor, Oakland, CA
94607-5200 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): CHARLES, L.,
Sawyers [US/US]; 3343 Mondeville Canyon Road, Los
Angles, CA 90049 (US). CHARLIE, D., Chen [US/US];
3300 Sawtelle Boulevard, no.306, Los Angeles, CA 90066
(US). DEREK, Welsble [US/US]; 18420 Lemarsh Street,
No.28, Northridge, CA 91325 (US).

(74) Agent: OLDENKAMP, David, J.; Shapiro & Dupont
LLP, Suite 700, 233 Wilshire Boulevard, Suite 700, Santa
Monica, CA 90401 (US).

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(54) Title: METHODS AND MATERIALE FOR ASSESSING PROSTATE CANCER THERAPIES

(57) Abstract: Using microarray-based profiling of isogenic prostate cancer xenograft models, we found that a modest (2-5 fold) increase in androgen receptor (AR) mRNA was the only expression change consistently associated with developing resistance to antiandrogen therapy. Increased levels of AR confer resistance to anti-androgens by amplifying signal output from low levels of residual ligand and altering the normal response to antagonists. This invention provides cell based assays for use in the examination of new therapeutic modalities and provides insight toward the design of novel antiandrogens.

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US04/42221

A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : C12Q 1/68; A01N 43/04; A61K 31/70
US CL : 435/6; 514/1, 44

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 435/6; 514/1, 44

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

Please See Continuation Sheet

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 6,489,163 B1 (ROY et al) 03 December 2002 (03.12.02), columns 1-2, claims.	10, 11
A	WALLEN et al., "Androgen Receptor Gene Mutations in Hormone-Refractory Prostate Cancer", J. Pathology 1999, Vol. 189, pages 559-563.	1-15, 17-19
A	LU et al. "Molecular Mechanisms of Androgen-Independent Growth of Human Prostate Cancer LNCaP-A1 Cells", Endocrinology 1999, Vol. 140, No. 11, pages 5054-5059.	1-15, 17-19

Further documents are listed in the continuation of Box C.

See patent family annex.

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"O" document referring to an oral disclosure, use, exhibition or other means		
"P" document published prior to the international filing date but later than the priority date claimed		

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Name and mailing address of the ISA/US

Mail Stop PCT, Attn: ISA/US
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

Facsimile No. (703) 305-3230

Authorized officer

Nancy T. Vogel

Telephone No. (703) 308-0196

INTERNATIONAL SEARCH REPORT

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Continuation of B. FIELDS SEARCHED Item 3:
EAST, STN file Medline
search terms: androgen receptor, hormone, resistan?, refractory?, sensitiv?, mRNA, levels, assay